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File Code: 1570-1
Appeal No.: 07-05-00-0042-A215
Date: September 18, 2007

CERTIFIED - RETURN RECEIPT REQUESTED

Scott Greacen
Public Lands Coordinator
Environmental Protection Information Center
P. O. Box 147
Eureka, CA 95502

Dear Mr. Greacen:

On August 6, 2007, you filed a Notice of Appeal (NOA) on behalf of Environmental Protection Information Center (EPIC) pursuant to 36 CFR 215 of the Shasta-Trinity National Forest Supervisor's Record of Decision (ROD) approving Alternative 1, of the Pilgrim Vegetation Management Project Final Environmental Impact Statement (FEIS) that was signed on June 1, 2007. Mr. George Sexton also signed the appeal for Klamath Siskiyou Wildlands Center (KS Wild). Because your name is listed first, I designate you the lead appellant.

I have reviewed the entire appeal record, including your written Notice of Appeal (NOA), the ROD, FEIS, and supporting documentation. I have weighed the recommendation from the Appeal Reviewing Officer and incorporated it into this decision. A copy of the Appeal Reviewing Officer's recommendation is enclosed. This letter constitutes my decision on the appeal and on the specific relief requested.

FOREST ACTION BEING APPEALED

The Shasta-Trinity Forest Supervisor proposes to implement Alternative 1 of the Pilgrim Vegetation Management Project, to treat approximately 3,800 acres within an 8,500-acre assessment area. This alternative will commercially thin approximately 1,200 acres of naturally occurring stands, commercially thin and remove insect-infested and diseased trees from about 1,035 acres of naturally occurring stands, commercially thin about 785 acres of planted stands, and commercially thin about 40 acres of mature pine to reduce ladder fuels and maintain the older trees. The alternative will also remove dead and dying knobcone pine trees from about 10 acres and replant with mixed conifer. Approximately 415 acres of diseased and insect infested stands will be regenerated by harvesting and replanting with a mix of conifers. Woody fuel will be reduced to decrease potential wildfire by underburning about 200 acres and tractor piling and burning about 700 acres. The project will remove conifers encroaching on oaks, aspens, and about 275 acres of dry meadow areas. Approximately .3 miles of new road and temporary road spurs will be constructed, approximately 10 miles of existing roads will be closed with guard rail barricades or earth berms, and two miles of existing roads will be decommissioned. This decision approves a non-significant amendment to the Forest Plan.

APPEAL REVIEWING OFFICER'S FINDINGS

The Appeal Reviewing Officer, Max Copenhagen, found that the Forest Supervisor's decision was appropriate and complied with existing laws, policies, and regulations. The Forest Supervisor provided information supporting the logic and rationale in selecting Alternative 1 and described the included management activities. Documentation provided by the Forest Supervisor demonstrated compliance with the Shasta-Trinity National Forest Land and Resource Management Plan and applicable laws, regulations and policies in light of your concerns about management indicator species, Threatened and Endangered Species, soil compaction, fire risks, global warming, roads, analysis of the forest plan amendment, adequacy of the range of alternatives, and the science of snags and down woody material. The ARO found the purpose and need for the project was clear. The Forest Supervisor was responsive to public concerns. He recommended affirmation of the Forest Supervisor's decision.

DECISION

I agree with the ARO's analysis as presented in the recommendation letter. Most issues in your appeal are very similar to those you raised in your comments on the DEIS and the record is adequate to support the Forest Supervisor's decision. Further, while your concerns about subsoiling and the use of road 40N80Y were not raised during the comment period, the record is adequate to support the Forest Supervisor's decision on these issues as well. All appeal issues raised have been considered.

I affirm the Forest Supervisor's decision to implement Alternative 1 described in the Record of Decision. I deny your requested relief. The project may be implemented on, but not before, the 15th business day following the date of this letter (36 CFR 215.9(b)).

My decision constitutes the final administrative determination of the Department of Agriculture [36 CFR 215.18(c)].

Sincerely,

/s/ Beth G. Pendleton
BETH G. PENDLETON
Deputy Regional Forester
Appeal Deciding Officer

Enclosure

USDA **United States Department of Agriculture** **Forest Service** **Pacific Southwest Region**

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File Code: 1570-1 **Date:** September 12, 2007

Subject: Pilgrim Vegetation Management Project
Appeal No. 07-05-00-0042-A215
Shasta-Trinity National Forest

To: Appeal Deciding Officer

I am the designated Appeal Reviewing Officer for this appeal. This is my recommendation on disposition of the appeal filed by Scott Greacen, on behalf of Environmental Protection Information Center, and by George Sexton on behalf of Klamath Siskiyou Wildlands Center appealing the Shasta-Trinity National Forest (STNF) Record of Decision (ROD) for the Pilgrim Vegetation Management Project Final Environmental Impact Statement (FEIS) signed by Forest Supervisor J. Sharon Heywood.

BACKGROUND

Description of project - The Shasta-Trinity Forest Supervisor proposes to implement Alternative 1 of the Pilgrim Vegetation Management Project, to treat approximately 3,800 acres within an 8,500-acre assessment area. This alternative will commercially thin approximately 1,200 acres of naturally occurring stands, commercially thin and remove insect-infested and diseased trees from about 1,035 acres of naturally occurring stands, commercially thin about 785 acres of planted stands, and commercially thin about 40 acres of mature pine to reduce ladder fuels and maintain the older trees. The alternative will also remove dead and dying knobcone pine trees from about 10 acres and replant with mixed conifer. Approximately 415 acres of diseased and insect infested stands will be regenerated by harvesting and replanting with a mix of conifers. Woody fuel will be reduced to decrease potential wildfire by underburning about 200 acres and tractor piling and burning about 700 acres. The project will remove conifers encroaching on oaks, aspens, and about 275 acres of dry meadow areas. Approximately 0.3 miles of new road and temporary road spurs will be constructed, approximately 10 miles of existing roads will be closed with guard rail barricades or earth berms, and two miles of existing road will be decomissioned. This decision approves a non-significant amendment to the Forest Plan to allow less than 15% of the area to be retained in late successional forest due to existing mortality and disease. Healthy trees will be retained.

Scoping - The Pilgrim Vegetation Management Project has been listed in the Schedule of Proposed Actions (SOPA) since January 2004. The Notice of Intent (NOI) to prepare an EIS was published in the Federal Register on February 14, 2005. Letters, including a copy of the Notice of Intent and a map were sent to interested and affected parties, and the unit met to discuss the project with local tribes. Two field tours were offered. Additional public scoping was initiated on September 21, 2005 to allow public comment on the project specific plan amendment. Eleven written letters were received and two telephone conversations took place in response to public scoping.

Comments to the DEIS –The Notice of Availability of the Pilgrim Vegetation Management Project Draft Environmental Impact Statement (DEIS) was published in the Federal Register on June 23, 2006. The Legal Notice for Comment was published in the Redding Record Searchlight on June 28, 2006. Copies of the DEIS were mailed to agencies and interested publics. Timely comments were received from seven groups or individuals. Scott Greacen for Environmental Protection Information Center and George Sexton for Klamath Siskiyou Wildlands Center submitted timely comments, dated August 7, 2006, and have eligibility to appeal.

APPEAL SUMMARY

The legal notice of decision was published on June 21, 2007; the deadline for filing appeals was August 6, 2007. The appeal was filed on August 6, 2007 and is timely.

District Ranger Michael Hupp contacted Scott Greacen representing Environmental Protection Information Center and Klamath Siskiyou Wildlands Center to discuss many aspects of this project; Mr. Huff and Mr. Greacen were unable to resolve the issues raised by Mr. Greacen in the appeal.

As relief the appellants request that: 1) the decision to implement the Pilgrim Project be withdrawn and 2) that the Forest Service modify the timber sale and conform its environmental impact statement to the standards described in the appeal.

ISSUES AND RESPONSES

Issue 1: The FEIS provides no population numbers for management indicator species. The Forest Service has neither validated the habitat capability models it uses to assess the viability of management indicator species, nor provided any data or analysis which substantiate or specify the link between population numbers or trends of the red-breasted nuthatch, their habitat, and populations of other animals dependent on late-successional forest and their habitat.

Response: The Shasta-Trinity National Forest (STNF) Wildlife Management Indicator Habitat Assemblage Monitoring Report (Report) in the project record explains the nine management indicator assemblage habitats and the use of them in a MIS analysis. These assemblages include: late-seral, openings and early successional, multi-habitat, riparian, aquatic, hardwoods, snags and down logs, chaparral, and cliffs, caves, talus and rock outcrops. Page 9 of the Report indicates that the STNF Land and Resource Management Plan (LRMP) also mandated the Forest to use appropriate indicator species *or* their habitat components to represent the assemblages. This allows the Forest to either use population trend data or key habitat components in an MIS analysis (FEIS Appendix L, pg. L-4). The LRMP did not select individual MIS. Rather it allows the biologist to select the appropriate species for each project-level analysis (FEIS, Appendix L - Project Level Management Indicator Assemblage Report). Management indicator assemblage habitat associations were selected for analysis due to the presence of suitable habitat that could be impacted by the project (FEIS, pg. 71).

The habitat relationship models are selected from either the California Wildlife Habitat Relationship (CWHR) System or better, more recent or more appropriate models or local descriptions; the CWHR System is considered "a state-of-the-art information system for California's wildlife" and provides the most widely used habitat relationship models for California's terrestrial vertebrate species (FEIS Appendix L, pg. L-6). Management indicator assemblage habitat trend is monitored using ecological and vegetation data for the STNF; these data include spatially explicit ecological and vegetation layers created from remote-sensing imagery (FEIS, Appendix L, pg. L-6). Pages 71 through 84 of the FEIS and pages L-15 through L-16 of Appendix L "Project Level Management Indicator Assemblage Report" explains the reasoning for choosing the red-breasted nuthatch as an appropriate MIS species. This section also describes the relationship between the project level impacts to forest-scale habitat and population trends for the species and other species that occur within the habitat assemblage. Appendix L discusses in detail the availability of population trend data (over 30 years) from U.S. Geological Survey's Breeding Bird Survey (BBS) program.

I find that the Forest Supervisor conducted an adequate analysis relative to the effects of the proposed project on MIS including late-successional species and their associated habitat.

Issue 2: The Pilgrim Project FEIS does not take "a hard look", as NEPA requires, at the potential impacts of this project on the Fisher.

Response: Pages 2 and 14 of the Pilgrim Vegetation Management Biological Evaluation (referred to on page 62 of the FEIS) indicate that Pacific fisher was dropped from further analysis based upon the location (elevation) of the project area and the lack of suitable habitat (open forest canopy) within the project area. No suitable habitat was found for the species and no resident animals have been recorded within the project area.

I find that the Forest Supervisor appropriately considered the impacts to the Pacific fisher as demonstrated in the Biological Evaluation.

Issue 3: Inadequate Soils analysis and disclosure.

Issue 3a: "The FEIS takes two apparently contradictory positions with respect to the potential impacts of the proposed action on soils in the Pilgrim Project area. On the one hand, the document describes the area's soils as resist[ant] to the adverse effects of compaction…On the other hand, the FEIS admits that 'compaction was found at or slightly above threshold over approximately 20 percent of the area surveyed'…".

Response: In a literal sense, the statements are not contradictory; statements describing the aerial extent of compaction and subsequent effects of compaction are separate subjects. However, the analysis document does offer differing perspectives on whether the effects of compaction may be adverse or not. "Soils with these textures are known to be resistant to the adverse effects of compaction" (FEIS, pg. 88). This statement reflects scientific findings from the Long-Term Soil Productivity Study (R. F. Powers, PSW Research Station, Redding CA),

which indicate that compaction on coarse textured soils, such as found in the project area, may have negligible or even beneficial effects in terms of soil productivity.

Alternately, the LRMP soil standards view compaction narrowly, defining a threshold (10% reduction in soil porosity) where soil compaction is assumed to be detrimental, i.e. leading to significant declines in productivity. This standard applies to all soil types alike. Therefore, when "compaction was found at or slightly above threshold over approximately 20 percent of the area surveyed" on the Shasta soil series (FEIS, pg. 89), this indicates a level of concern with existing legacy compaction.

Thus, the apparent contradiction is a matter of source. This current science (Powers) indicates that LRMP standards may be conservative, meaning the detrimental threshold as defined in the standards may not accurately indicate the point at which productivity declines are incurred for these soil types. However, opposing science exists (FEIS, pg. 88), so these need to be clarified before standards are amended. As LRMP standards have not been amended, they are binding for the proposed activities as they stand. Use of conservative standards is not a problem, as they still assure an outcome of protecting the soil resource in accordance with the Forest Plan and NFMA direction.

Issue 3b: The FEIS should have clarified the need for, and potential impacts of, the subsoiling treatment. It is not clear why such treatment would be required if, as the FEIS suggests, soil compaction is benign or beneficial. As well, the FEIS fails to disclose the extent to which the proposed subsoiling will actually alleviate the soil compaction it is proposed to address.

Response: Potential impacts of subsoiling treatment were not raised as an issue during scoping or comment period. Appellants take issue with secondary effects upon other forest resources, particularly TES plants and arch sites. There are no threatened, endangered, or sensitive botanical species within the project area to be affected (FEIS, pg. 66), so there are no direct or indirect effects to TES plants. Archaeological reconnaissance and management measures performed conform to the procedures identified in the Region 5 Heritage Programmatic Agreement (FEIS, pg. 112). Therefore, the Forest Supervisor expects that limited areas where subsoiling is to be prescribed will not contain archeology sites (FEIS, pg. 112).

The purpose of subsoiling treatments is "to alleviate soil compaction." (FEIS, pg. 90); see also response to 3a. Landings and skid trails within approximately 200 feet of landings are areas where soil compaction is noted to occur at levels defined as detrimental in LRMP standards (FEIS, pg. 90); given surveyed levels of detrimental legacy compaction, these areas where new detrimental compaction is expected from proposed new activities are to be mitigated. Overall soil resource values may be adversely affected on these limited areas, so there is a need for subsoiling treatment per LRMP direction (FEIS, pg. 91). Though current science indicates that these treatments may not be necessary on these soil types for soil productivity reasons (FEIS, pg. 88), it may still be desired for soil hydrologic function purposes. In lieu of amendment, LRMP direction is still binding, so mitigation is needed relevant to applicable soil quality standards.

Subsoiling using a winged subsoiler is a commonly used and widely accepted standard practice in soil science to alleviate soil compaction. Expectations are that treatments, applied correctly, will be effective in reducing soil bulk density, breaking up platy structure, and increasing soil porosity sufficient to meet soil standards within a few years. Subsoiling under appropriate conditions will insure that these mitigation measures are applied effectively in the great majority of places so treated.

With respect to subsoiling impacts upon root diseases, this issue again was not raised during public comment period; the Responsible Official and project record never had the opportunity to respond to this concern. Conventional thinking is that compaction may pose a risk toward exacerbating root disease; therefore de-compaction treatments such as subsoiling should be beneficial. That said, very little is known within the scientific community regarding management effects on root diseases, even less on subsoiling effects specifically. So impacts are unknown, and stating relationships would be speculative.

Issue 3c: Given the potential reduction in soil productivity, road construction and reconstruction on sensitive soil types appears to conflict with the avowed "forest health" purpose and need for the project.

Response: This issue of road construction was raised and addressed during the DEIS comment period (FEIS, Appendix B, Comment #19, pg. B-7). The forest health purpose and need for the project applies to areas dedicated to productivity (FEIS, pg. 90). Also, disclosed in the 'Unavoidable Adverse Effects' section, "acres of commercial forest lands will be lost to long-term timber production where landings, main skid trails and new roads are constructed. Although these areas are necessary for conventional ground based logging operations and the acres lost are within Forest Plan standards, some will see this as an adverse impact to the environment." (FEIS, pp. 119-120) Road construction and reconstruction activities, regardless of soil type, represent infrastructure necessary to accomplish needed treatments upon the greater landscape; "Soil Quality Standards are not applied to areas not dedicated to [vegetative] productivity. As such, new road construction [and reconstruction] is not held to the same criteria as other activities" (FEIS, pg. 90). These small-scale circumstances are appropriately disclosed in the DEIS and FEIS.

I find that the Forest Supervisor's decision adequately analyzed soil effects and conforms to STNF LRMP standards for soil quality.

Issue 4: The FEIS fails to disclose and analyze the potential fire risks associated with the even-aged plantations the project proposes to establish. The FEIS fails to adequately describe, analyze, and disclose the potential for increased future fire risks in the stand proposed for heavy thinning.

Response: The Pilgrim project area currently has a moderate hazard rating and a high risk rating; fuel loading in the infected areas is 45-50 tons per acre (t/a), and 5-30 t/a in areas not experiencing accelerated deterioration. Desired fuel conditions are 5-10 t/a, mimicking fuel models 2, 8, or 9; current fuel models are FM 2 (5%), FM 8 (3%), FM 10 (92%). The preferred

alternative effectively treats fuels resulting in a fuel model distribution of 18% FM2, 82% FM8, and 0% FM10 (FEIS pp. 49-50). Thinning and sanitation/regeneration prescriptions and prescribed burning will remove fuel ladders, increase canopy base height; remove dead crowns, and reduce crown density. Prescribed burning and tractor pile burning will reduce the likelihood of stand replacement crown fire in the treated units (FEIS, pg. 52). The hazard level of moderate is reduced to low-moderate; risk level of high is unchanged (Fuels Specialist Report, pg. 9). Direct and indirect effects of this change in fuel models and distribution reduces the chance of crown fire moving through the canopy or intense surface fire, on 100% of the treated acres; the fuel model distribution is changed, the ladder and surface fuels are reduced, crown density is reduced, and canopy base height is increased (FEIS, pg. 52). The chance of crown fire moving through the canopy is reduced in 82% of the project area (Fuels Specialist Report, Table 5, pg. 15). Regeneration harvest accounts for approximately 415 acres of the approximately 3,800 acres of treated area (11% of the treated acres), creating approximately 21 openings ranging in size from 5 to 40 acres (FEIS Summary, pg. iv); and knobcone sanitation will occur on 10 acres (<1% of the treated acres). If left unmanaged, these 21 openings may develop into even aged stands. Short term (less than 10 years) fuel models can be predicted to be FM2, and long term (10+ years) fuel models can be predicted to be FM5, FM8, and/or FM9; however, evidence in the FEIS and Fuels Specialist report suggest future maintenance is expected to occur in the treated project area, resulting in continued low intensity fire behavior.

In the thinning units, slash created will be treated on approximately 700 acres, by jackpot burning, underburning, hand or machine piling and burning. Part of the fuels objective would include keeping the hazard fuels to a minimum along well-traveled corridors where higher human caused fires occur, to keep the fuels profile at a level that will reduce fire intensity (Fuels Specialist Report, pg. 13). In the knobcone pine sanitation area, fire danger will be reduced or eliminated considering the treatment type (harvest and replant) (Fuels Specialist Report, pg. 12). Monitoring and fuels maintenance in the project area is suggested in the 'Summary of Alternatives and Conclusions' on page 16 of the Fuels Specialist Report. The proposed action reduces the negative fire effects by the greatest degree and changes the largest [proportion of the project] area to the desired fuel models [when compared to other alternatives] (Fuels Specialist Report, pg. 15).

The FEIS, page 119, discloses that implementation of any of the alternatives, including no action, could cause some adverse environmental effects that cannot be effectively mitigated or avoided. Monitoring will occur, and fuels reduction maintenance will be applied to stands to prevent encroachment by less desirable fuel models (FEIS Appendix B, pg. B-11 and DEIS pg. 135, Appendix B, response to comment 34). To assist in returning the fuels profile across the project area back to the historical levels, maintenance is suggested at a 5-15 year interval (Fuels Specialist Report, pg. 16).

I find that the Forest Supervisor appropriately considered fire risks associated with plantations, and thinning.

Issue 5: The proposed action focuses on the increase of potential fuel in the context of a catastrophic wildfire, without considering possible habitat values of large amounts of down woody material.

Response: The preferred alternative will meet or exceed STNF LRMP down woody debris standards. The standard for dead down material is set at 4-6 logs over 10' long of the largest diameter, or about 5-10 tons in matrix lands (FEIS Appendix H: Biological Assessment, pg. H-21; Fuels Specialist Report, pp. 2-3).

The direct effect of no action would be continuance of the present situation. Fragmented, low quality dispersal habitat would persist. The indirect effect of no action would be continuous further insect and disease induced tree mortality in the project area and vicinity (see also the Forest Vegetation section) and the potential for loss of habitat due to fire (see also the Fuels and Wildfire section) (FEIS pg. 55).

In the design criteria for all action alternatives, coarse woody debris is to be maintained, where feasible, at an average 5 tons per acres, a portion of which is in the form of 4 to 6 logs per acre meeting minimum requirements of over 10 feet long at the largest available diameter (FEIS pg. 23). If salvage removes more than the minimum snags, it is expected that persistent pathogens will overproduce snags (which become logs) (FEIS Appendix H, BA, pg. H-20). LMP deadwood requirements will be met or have the prospect of existing snags meeting minimum log levels; where they are not met, one 10' x 10' minimum slash pile or equivalent 5-15 tons large deadwood per acre will be left unburned in prescribed tractor piling units. Cull logs greater than 20 inches in diameter at the large end will not be included as timber; slash piles within 200' of a system road may be burned to reduce hazards and improve visual quality (FEIS Appendix H: Biological Assessment, pg. H-8).

Direct, indirect, and cumulative effects to snag and downed log assemblages for each alternative are addressed in the FEIS Chapter 3, pp. 76-78.

I find that the Forest Supervisor appropriately considered the habitat value of down woody debris.

Issue 6: The Forest Service must consider the potential impacts of global warming, under the most likely scenarios for the Pilgrim project area, on a number of specific factors including fire, insects and disease, drought, wildlife and late-successional forest.

Response: The speculative nature of impacts from global warming would prohibit us from making reliable predictions about ecological trends at the local level. If provided relevant literature and specific concerns about impacts from this project, we could examine the evidence, determine its importance, and respond accordingly.

The Forest Service updated the Resources Planning Act assessment in 2007, and acknowledges that climate change is occurring, and there is concern. However, based on the best available science, it would be too remote and speculative to factor any specific ecological trends or

substantial changes in climate into the analysis of environmental impacts of this project. Therefore, such issues are generally outside the scope of this project level analysis.

Stand density management and forest health improvement as part of the Pilgrim project are consistent with managing forests responding to a warmer, drier climate. One of the project's objectives is to reduce fuel hazards by modifying existing stand conditions which in turn reduce fire intensity and probability of stand replacing wildfire. (FEIS, pg. 29; FEIS, Appendix K, pg. K-11). Ground fuels will be maintained within forest plan desired conditions, reducing wildland fire hazard, and thinning will improve forest health (FEIS, pp. 118-119) making stands of trees more resistant to insects, disease, and drought. Restoration of approximately 275 acres of dry meadows with underburning will help to restore and maintain historical conditions of vegetation (FEIS. pg.40).

The Forest Supervisor's decision is consistent with managing the Forest in response to changing environmental conditions.

Issue 7: Road density is not effectively disclosed and analyzed in the FEIS.

Issue 7a: Impacts of roads, and increased road density, are not addressed in the FEIS.

Response: "A Roads Analysis of the project assessment area was completed in April of 2005" (FEIS, pg. 101). This analysis is part of the record, and does clearly address impacts of roads and road density issues. The recommendations of that analysis are included in the proposed action (FEIS, pg. 101). The list of recommendations is in the FEIS, Appendix D.

Road density was considered in DEIS response to comment, "there is no forest standard, policy, or regulation that requires a given road density be attained…" (FEIS, Appendix K, pg. K.11). Improvement (reduction) in road density associated with the project is small, but nonetheless a benefit of project activities; road density improvement is not a project objective in the purpose and need. "Road closures and decommissioning are done to return unneeded roads to a forested condition…", not specifically to improve habitat fitness for selected species, as purported in DEIS comment #29 (FEIS, Appendix K, pp. K.10-11).

Issue 7b: Since the proposed road closures are not likely to be effective, open road density is not effectively disclosed and analyzed in the FEIS. The "open road density" index…is misleading, given that [closed] roads…are still likely to be used.

Response: This issue was raised and considered in the DEIS, Appendix K, Comments 27-28 (FEIS, pg. K-10). Response to comment indicated that expectations are for proposed road closures to be implemented and effective (FEIS, pg. K-10). The FEIS admits general difficulties of road closures on flat terrain (FEIS, pg. 101). However, "The Forest Service is currently developing regulations that will restrict all OHVs to designated routes" (FEIS, pg. K-10), which will receive funding for implementation and enforcement as a top national management priority. Therefore, road closures are likely to be effective, and road density is appropriately and effectively disclosed and analyzed in the FEIS.

<u>Issue 7c:</u> The Pilgrim FEIS does not appear to address the results of the STNF Roads Analysis with respect to road 40N80Y. The Roads Analysis designated this road for decreased maintenance. The Pilgrim Project appears to continue the existing use of the road without any changes or discussion.

Response: This issue was never raised during the scoping or comment period. The project Roads Analysis notes that road 40N80Y has been addressed in a previously completed Forest level roads analysis (2002), and is therefore not included in the project roads analysis for re-analysis. That analysis noted "this road is a cinder-surfaced local road, and probably should have been [designated] maintenance level 2" (Pilgrim Roads Analysis, pg. 1). The Pilgrim project does plan to continue existing use of this road.

The Forest Supervisor considered the transportation system report and project road analysis in making her decision.

<u>Issue 8:</u> The forest plan amendment allowing retention of less that 15% of green trees should receive detailed and specific analysis; the public should be afforded opportunities to comment specifically on the proposed amendment. The amendment is more than a non-significant amendment of the Forest Plan.

Response: The FEIS includes the Forest Plan Amendment as part of the proposed action and it was fully analyzed (FEIS, pp. 122-124) as part of Alternatives 1 and 2 to change Forest Plan 4-61, "Emphasize green-tree and snag retention Matrix management". It was also analyzed in Alternatives 3 and 4 to make no amendment to the Forest Plan for green tree retention. Analysis of significance according to the Code of Federal Regulations and Forest Service Handbook directs consideration of significance of change to a forest plan.

The original proposed action in the Notice of Intent did not have a proposal to amend the forest plan. In response to public comments, the forest initiated an additional public scoping period on September 21, 2005, to comment on this non-significant Forest Plan Amendment. Two written comments responsive to amending the forest plan were received, and these were used in developing Alternatives 1 and 2 to the proposed action. The Draft EIS, published June 23, 2006 included the non-significant amendment and the public was invited to comment for 45 days.

The forest considered the following factors to determine whether the proposed forest plan amendment would be significant or not significant:

A. Timing - This change is only in effect for the treatment duration of these cutting units; the 1995 Forest Plan standard and guide will again apply to the project area once harvest is complete.
B. Location and Size – The project area is 8,500 acres, with treatment to approximately 3,800 acres. The regeneration harvest units with less than 15% retention range in size from 5 to 40 acres, and total approximately 255 acres. The units total less than .004

percent of the commercial forestlands and less than .02 percent of the late successional forest in the watersheds.

C. Goals, Objectives, and Outputs – The change in green tree retention (GTR) standard would not alter long-term relationships between the levels of goods and services projected by the forest plan. Timber outputs projected by the Forest Plan would not change because the capable, available, and suitable land base is not adjusted.
D. Management Prescriptions – The amendment would change the GTR standards for this project only, and would not apply to future decisions for those cutting units.

The amendment is not a significant change to the forest plan because it is site-specific and applies only to cutting units on this project, it applies to only a small portion of the total project, it is minor in context of achieving the Forest plan and goals and objectives, and will move toward meeting the goals of the Forest Plan by controlling a root disease that would result in greater losses if no action is taken.

I find that the Forest Supervisor analyzed the Pilgrim project GTR amendment as part of all alternatives, the public had opportunity to comment on it, and it is a non-significant amendment to the forest plan.

Issue 9: The three action alternatives differ in only one significant variable. The FEIS did not adequately consider an alternative that would implement a diameter cap on the trees to be logged.

Response: Forest Service policy for consideration of alternatives is found in Forest Service Handbook (FSH) 1905.15 Part 14. Reasonable alternatives address significant issues while meeting the purpose and need of the project. Based on public comments, the responsible official identified two significant issues to be addressed in this analysis and developed alternatives to respond to them (FEIS, pp. 17-22).

Federal agencies are required by NEPA to rigorously explore and objectively evaluate all reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives that were not developed in detail (40 CFR 1502.14). Public comments received in response to the Proposed Action provided suggestions for alternative methods of action.

Alternative 5 was developed in response to the public suggestion of a 20-inch diameter limit for trees to be logged. The FEIS describes on pages 27-28 that this alternative was not considered in detail because retaining all trees 20 inches in diameter and larger would leave many stands or areas of stands overstocked at levels above the recommended basal area needed to decrease susceptibility to bark beetle infestations, therefore not meeting the purpose and need for forest health/growth objectives. It would also prevent removal of dead/dying and infected older and larger pine trees in regeneration harvest areas that are continuing to spread root disease.

Four alternatives were considered in detail: Alternative 1, the preferred alternative, which responds to the Purpose and Need for Action; Alternative 2, the proposed action modified to retain an average 60% canopy cover, which responds to significant issue 1; Alternative 3, the

proposed action modified to maintain 15% green tree retention in regeneration harvest units, which is responsive to Forest Plan direction to retain patches and single trees of at least 15% of the area with the largest, oldest live trees, decadent or leaning trees, and hard snags of each regeneration unit; and Alternative 4, no action, which would result in none of the proposed management activities being implemented within the project area at this time (FEIS, pages 17-22).

I find that the Forest Supervisor considered an adequate range of alternatives that responded to issues and met the purpose and need for the project.

Issue 10: The Pilgrim FEIS does not address the science regarding snags and down woody material that has developed over the last fifteen years of implementation of the Northwest Forest Plan.

Response: The current project record under review does not indicate that this issue was provided to the Responsible Official during the comment period. Therefore, the Responsible Official was unable to address the literature and its relevancy to the proposed project. The comment letter (dated August 7, 2006) does not specifically address the need to review Rose et al. (2001) for snag and down log retention. The need to address the literature was only brought forward in the Pilgrim Vegetation Management Project Appeal letter (dated August 6, 2007).

Rose et. al. (2001) does make informative suggestions towards snag and down log retention; this study applies to Pacific Northwest Forests. In particular, Rose et. al. makes these recommendations for Cascade forests within Oregon and Washington states. The Shasta-Trinity National Forest is within a different eco-type than Rose et. al. (2001) addresses. Current snag and down log retentions as used in the proposed action are set forth from the Shasta-Trinity National Forest Land and Resource Management Plan (1995). The LRMP incorporates by reference the management guidelines from the Northwest Forest Plan (1994), which presumably used the scientific literature available at that time.

I find that the Forest Supervisor considered the available science that was most applicable to the project area.

Issue 11: The Pilgrim FEIS bases its analysis of potential impacts to the Northern Spotted Owl on the framework provided by the Northwest Forest Plan which can no longer be relied on as a regulatory backstop for Forest Service project-level owl impacts analysis. The FEIS fails to adequately address how the proposed heavy logging of forests in the Pilgrim Project may affect dispersal between NSO and CSO.

Response: The FEIS under "Forest Plan Direction" states that the project was guided by management direction found in the Shasta-Trinity LRMP (FEIS pg. 12). The LRMP (1995) incorporates by reference all guidance from the Northwest Forest Plan (1994), Forest Service Manual 2600, and National Forest Management Act (NFMA). The Northwest Forest Plan is the current regulatory mechanism in which the US Forest Service bases its actions. The purpose of

the Northwest Forest Plan (NWFP) is to provide protection for late-successional species such as the northern spotted owl (NSO). Since the Shasta-Trinity LRMP incorporates by reference the direction provided by the NWFP, protection for later-successional species is currently being met. The FEIS states that the NWFP recognized that forest management would occur within NSO critical habitat and that consultation with US Fish and Wildlife Service would be completed (FEIS, pg. 13).

The Biological Opinion (January 2006) from US Fish and Wildlife Service (FEIS, Appendix I) states the following: "the biological opinion outlines effects of the proposed action, including our determination that the proposed action is not likely to destroy or adversely modify designated critical habitat for the northern spotted owl. Additionally, we concur with your determination that the proposed action may affect but is not likely to adversely affect the northern spotted owl" (FEIS, Appendix I, pg. I-3). The Biological Opinion (BO) discusses the use of the Pilgrim project area as dispersal habitat between northern and California spotted owls. The BO discusses the lack of suitable dispersal habitat in this area due site characteristics (FEIS, Appendix I, pg. I-16).

The Biological Assessment (FEIS, Appendix H) states that implementation of the proposed project may result in beneficial effects to critical habitat by producing additional potentially suitable dispersal habitat (FEIS, Appendix H, pp. H-24 through H-29).

I find that the Forest Supervisor completed an adequate analysis to address the effects of the proposed project on dispersal between northern spotted owls and California spotted owls.

FINDINGS

Clarity of the Decision and Rationale

The Forest Supervisor's decision and supporting rationale are clearly presented in the Record of Decision. Her reasons for selecting Alternative 1 are logical and responsive to direction contained in the Shasta-Trinity National Forest Land and Resource Management Plan. The current condition of the Pilgrim project area is not consistent with the desired condition in the Forest Plan. The project was designed to address the forest health conditions that has caused significant tree mortality from insects and disease. Existing laws, regulations, and agency policies were followed.

Comprehension of the Benefits and Purpose of the Proposal

The purpose of the proposal is to improve forest health and reducing fuels as described in the Pilgrim Vegetation Management Project FEIS and ROD. The purpose is consistently considered in the formulation and development of the alternatives and in the discussions of the biological and physical effects associated with project implementation.

Consistency of the Decision with Policy, Direction, and Supporting Information

The decision is consistent with the Shasta-Trinity National Forest Land and Resource Management Plan. The analysis in the FEIS supports compliance with existing management direction and policy. The ROD and FEIS make the appropriate findings required by law to affirm the project's compliance with NFMA, ESA, Clean Water Act, Clean Air Act, and National Historic Preservation Act. The analysis uses detailed resource information related to the project.

Effectiveness of Public Participation Activities and Use of Comments

Public participation was adequate and well documented. The project was added to the quarterly Schedule of Proposed Actions. The Forest mailed scoping letters, and distributed a draft EIS to interested groups and individuals. Field tours were offered and one took place. Responses to the comments received were detailed and included as part of the final EIS, and alternatives were developed in response to significant issues. The decision of the Forest Supervisor indicated she considered and responded to public input.

RECOMMENDATION

My review was conducted pursuant to and in accordance with 36 CFR 215.19 to ensure the analysis and decision is in compliance with applicable laws, regulations, policy, and orders. I reviewed the appeal record, including the comments received during the comment period and how the Forest Supervisor used this information, the Appellant's objections and recommended changes.

Based on my review of the record, I recommend the Forest Supervisor's decision be affirmed on all issues. I recommend Mr. Greacen's requested relief be denied on all issues.

/s/ Max J. Copenhagen

MAX J. COPENHAGEN
Appeal Reviewing Officer
Deputy Forest Supervisor, San Bernardino National Forest